II. CLAIMS

1. Cancelled

2. (Currently Amended) A method according to claim 25 ~~claim 1~~, wherein angiogenesis properties of a fibrin matrix are modified.

3. (Currently Amended) A method according to claim 25 ~~claim 1~~, wherein the fibrinogen variant whose concentration is varied in step b) is selected from the group consisting of at least one of HMW fibrinogen, LMW fibrinogen, LMW' fibrinogen, Fib420 fibrinogen and gamma' fibrinogen.

4. (Currently Amended) A method according to claim 25 ~~claim 1~~, wherein a fibrin matrix is formed which leads to accelerated angiogenesis.

5. Cancelled

6. (Currently Amended) A method according to claim 25 ~~claim 1~~, wherein a fibrin matrix is formed which leads to decelerated angiogenesis.

7-8. Cancelled

9. (Currently Amended) A method according to claim 25 ~~claim 1~~, wherein the fibrin matrix is formed *in vitro*, the fibrin matrix being formed by enzymatic conversion ~~converting the fibrinogen by means of a suitable enzyme, such as thrombin,~~ and optionally factor XIIIa and $CaCl_2$, into fibrin.

10. (Original) A method according to claim 9, wherein the fibrin matrix is used in an angiogenesis test.

11. (Currently Amended) A method according to claim 25 ~~claim 1~~, wherein the fibrin matrix is formed *in vivo*, by applying the the fibrinogen composition, optionally in combination with a suitable enzyme, ~~such as thrombin,~~ and optionally factor XIIIa and $CaCl_2$, ~~being applied~~ in the place where the formation of a fibrin matrix takes place.

12. (Original) A method according to claim 11, wherein the fibrinogen is applied to inhibit or prevent tumor growth, cicatrization, adhesions and the like, or to promote the healing of burns and other wounds.

13. (Currently Amended) A method according to claim 25 ~~claim 1~~, wherein the fibrin matrix is formed *in vivo* from a fibrinogen in which the HMW/LMW and/or HMW/LMW' ratio is modulated by stimulating or inhibiting the conversion of HMW fibrinogen into LMW fibrinogen~~, such as within the scope of a treatment of post-thrombotic syndrome~~.

14. (Original) A pharmaceutical composition, comprising fibrinogen and a pharmaceutically acceptable carrier, wherein the fibrinogen consists of a selected fibrinogen variant or a fibrinogen enriched or depleted in a fibrinogen variant.

15. (Original) A pharmaceutical composition according to claim 14, wherein the fibrinogen consists of HMW fibrinogen or

of a mixture of fibrinogen variants enriched in HMW fibrinogen or depleted in LMW en/of LMW' fibrinogen.

16. (Original) A pharmaceutical composition according to claim 15, which is suitable for promoting wound healing, inhibiting or preventing cicatrization or treating burns.

17. (Original) A pharmaceutical composition according to claim 14, wherein the fibrinogen consists of LMW fibrinogen or of a mixture of fibrinogen variants enriched in LMW fibrinogen or depleted in HMW fibrinogen.

18. (Original) A pharmaceutical composition according to claim 14, wherein the fibrinogen consists of LMW' fibrinogen or of a mixture of fibrinogen variants enriched in LMW' fibrinogen or depleted in HMW fibrinogen.

19. (Currently Amended) A pharmaceutical composition according to claim 17 ~~of 18~~, which is suitable for inhibiting or preventing tumor growth or adhesions.

20. (Original) A test kit, comprising components for the formation of a fibrin matrix, including fibrinogen, wherein the fibrinogen consists of a selected fibrinogen variant or a fibrinogen enriched or depleted in a selected fibrinogen variant.

21. (Original) A test kit according to claim 20, wherein the fibrinogen consists of HMW fibrinogen or of a mixture of fibrinogen variants enriched in HMW fibrinogen or depleted in LMW and/or LMW' fibrinogen.

22. (Currently Amended) A test kit according to ~~any one of claims 20-22~~ claim 20, also comprising an enzyme suitable for forming fibrin from fibrinogen, such as thrombin, and optionally factor XIIIa and/or $CaCl_2$.

23. (Currently Amended) A test kit according to ~~any one of claims 20-22~~ claim 20, also comprising components for effecting angiogenesis.

24. (Original) A test kit according to claim 23, comprising as components for effecting angiogenesis one or more angiogenic growth factors, such as fibroblast growth factor-2 (FGF-2) or vascular endothelial growth factor (VEGF), and/or tumor necrosis factor alpha (TNF-α), and/or cells, such as human endothelial cells.

25. (New) A method for modifying the properties of a fibrin matrix comprising the steps of

a) selecting a composition consisting of multiple variants of fibrinogen,

b) modifying the fibrinogen content of at least one fibrinogen present in the composition of step a) to change the relative concentration of such at least one fibrinogen variant, and

c) forming a fibrin matrix from the composition of step b).

26. (New) A method according to claim 2 where the fibrinogen variant who concentration is varied in step b) is HMW fibrinogen.

27. (New) A method according to claim 2 where the fibrinogen variant whose concentration is varied in step b) is LMW fibrinogen.

28. (New) A method according to claim 2 where the fibrinogen variant whose concentration is varied in step b) is LMW' fibrinogen.

29. (New) A method according to claim 2 where the fibrinogen variant whose concentration is varied in step b) is Fib420 fibrinogen.

30. (New) A method according to claim 2 where the fibrinogen variant whose concentration is varied in step b) is gamma fibrinogen.

31. (New) A method according to claim 2 where the HMW fibrinogen concentration is increased.

32. (New) A method according to claim 2 where the HMW fibrinogen concentration is decreased.

33. (New) A method according to claim 2 where the LMW fibrinogen concentration is increased.

34. (New) A method according to claim 2 where the LMW fibrinogen concentration is decreased.

35. (New) The method of claim 13 wherein the HMW/LMW and/or HMW/LMW' ratio is modulated in the course of treatment of post-thrombotic syndrome.